# Comments and Responses Preliminary Final Environmental Impact Statement EIS Waukesha Great Lakes Water Diversion January 2016

# **Introduction**

The Department of Natural Resources (department) held a public comment period on the draft Environmental Impact Statement (EIS) and draft Technical Review from June 25 to August 28, 2015. The department received 3,634 written comments from individuals and groups. Additionally, comments were received at three public hearings on August 17 and 18, 2015 at Waukesha, Milwaukee and Racine. Of the 404 people who registered at the hearings, 128 provided oral testimony.

Comments received are grouped and summarized under topic headings. Responses are provided to the summarized comments. Representative individual comments are also included for some comment topics.

## **Precedent**

# **Summary**

Comments expressed the opinion that allowing the proposed diversion of Lake Michigan water creates a precedent allowing other diversions under the Great Lakes – St. Lawrence River Basin Water Resources Compact (Compact) and the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement (Agreement), making diversions possible for non-straddling communities and counties, and other countries. A comment claimed that allowing Great Lakes water to be sold as a commodity means that no restrictions on sales of Great Lakes water could be enforced under international law.

Other comments stated that the exceptions in the Agreement/Compact prevent diversions to any communities outside the Great Lakes basin or straddling counties. Concerns were expressed that denying the Applicant its diversion under the Agreement/Compact would set the precedent that no communities in straddling counties could receive a diversion.

## Response

In its Technical Review, the department determined that the proposed diversion is approvable under the Agreement/Compact and plans to forward the application to the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Regional Body (Regional Body) and Great Lakes – St. Lawrence River Basin Water Resources Compact Council (Compact Council) for review. The Agreement and Compact generally ban diversions, but provide limited exceptions for a public water system in a "straddling community" or a "community within a straddling county" if communities meet strict criteria. No Agreement/Compact provision provides any eligibility for a diversion to

areas outside of a straddling county. The specifics of any diversion proposals are likely to be a unique set of facts that have limited applicability to any other diversion approval.

The preliminary final EIS includes an evaluation of precedence in Section 6.

## **Service Area**

The department received many comments about the Applicant's delineated water supply service area, which includes the City of Waukesha, portions of the City of Pewaukee, and portions of the Towns of Waukesha, Genesee, and Delafield. Comments included:

Comment: The delineated service area does not meet the Agreement/Compact
definition of "community in a straddling county", and therefore cannot be used to
define the needs of the community under the Compact. The Applicant must define
its need for water based on the City's corporate boundaries, or on the "current"
service area.

Response: A "community within a straddling county" is defined by the Agreement/Compact as "any incorporated city, town or the equivalent thereof, that is located outside the Basin but wholly within a County that lies partly within the basin. . "¹ The definition of "Community within a straddling county" in Wis. Stat. s. 281.346 (I)(d) does not include the phrase "or equivalent thereof," but it was not necessary. Wis. Stat. s. 281.346, Stats. specifies that a diversion proposal must be consistent with an approved water supply service area plan under Wis. Stat. s. 281.348. The department considers the delineated water supply service area of the Waukesha Water Utility to be a "community within a straddling county" under the Agreement/Compact and Wisconsin's Compact implementing laws and regulations.

2. **Comment:** Use of the delineated service area by the Applicant is inconsistent with the corporate boundary used for the Great Lakes water diversion by New Berlin.

**Response:** New Berlin's, application as a straddling community included a water supply service area that was delineated by the Southeastern Wisconsin Regional Planning Commission (SEWRPC). The water supply service area SEWRPC delineated for New Berlin is consistent with its approved sewer service area, as required by Wis. Stat. s. 281.348. The process for delineating the service areas are the same for Waukesha and New Berlin. New Berlin's delineated water supply and sewer service areas are wholly within its municipal boundaries. New Berlin's service areas include portions of the City where municipal sewer and water are currently not served, but municipal services can be expanded under the terms of their approval.

<sup>&</sup>lt;sup>1</sup> Compact s. 1.2.; Agreement art. 103, Wis. Stat. § 281.343 (1e)(d), and Wis. Stat. § 281.346 (1)(d)

Constraining Waukesha to the existing city limits violates Wis. Stat. s. 281.348 which requires a water supply service area to be consistent with the approved sewer service area. The department does not interpret the Agreement/Compact as a land use regulation document that requires a community to forfeit future development as a condition of diversion approval.

3. **Comment:** Other communities included in the delineated service area do not need a new source of water and officials of some of those communities have stated that they do not want Lake Michigan water.

**Response:** The Application addresses the Agreement/Compact criteria pertaining to the adequacy of potable water supplies and whether reasonable water supply alternatives exist for the entire water supply service area as delineated by SEWRPC. In addition, the application includes documentation that demonstrates each of the affected communities held public meetings and supported inclusion in the Applicant's water supply service area plan including the delineated water supply service area.

4. **Comment:** The Applicant established and/or wants to use the delineated service area because doing so will allow the Applicant to expand its population, businesses and industries. Such development will result in sprawl.

**Response:** See land use comments, below.

5. **Comment:** The "Community in a Straddling County" exemption was included in the Compact with Waukesha in mind, and it was understood that the water supply service area was the definition of "community" that would be applied.

**Response:** Comments noted.

## **Conservation**

Many comments were received regarding the Applicant's water conservation program, including:

1. **Comment:** The Applicant's conservation program is insufficient to meet Compact requirements.

**Response:** The Agreement/Compact requires that the need for the diversion cannot be reasonably avoided through the efficient use and conservation and that any approved diversion is implemented such that it incorporates environmentally sound and economically feasible conservation measures. The department determined that both of these criteria were met in C1 and C2 of the technical review

2. **Comment:** The neighboring communities included in the delineated service area do not have conservation programs in place, and therefore do not meet the Compact requirements.

**Response:** Neither the department nor the Waukesha water utility has authority to require individuals who are on private water supply to comply with Waukesha's water conservation plan. The Applicant has recently implemented a requirement that properties outside of the City of Waukesha that connect to the Waukesha Water Utility, enter into a contract to comply with the Applicant's water conservation plan. This was noted in a memorandum submitted by the applicant to the department on October 29, 2015.

3. **Comment:** The Applicant should/must include additional conservation measures, including expanded cost supports for plumbing upgrades, expanded water use restrictions, rainwater systems, grey water systems, wastewater recycling systems, and aquifer recharge.

**Response:** The actions an individual, business, or community can take to reduce water use or increase efficiency are numerous. Consequently, there is always more that can theoretically be done if costs and benefits are not considered. The Agreement/Compact has no requirement that all possible conservation measures be implemented.

4. **Comment:** Conservation measures should be implemented by the Applicant prior to a diversion approval.

**Response:** According to NR 852, the applicant is required to implement all mandatory Conservation and Efficiency Measures (CEMs), compile a conservation plan and undertake a CEM analysis prior to applying for a diversion. The department determined in section C2 of the technical review that the Applicant met all NR852 requirements prior to submitting its application. The department notes that NR 852 does not require that all components of the conservation plan be implemented prior to application. The department expects that the applicant will adapt its water conservation plan based on evaluation of its efficacy and on changing customer demand and available technology. In fact, the applicant has already adapted its plan to optimize demand reductions per conservation expenditure such that it exceeded projections for 2014. To date, the applicant's implementation of CEMs has resulted in savings estimated at 0.09 million gallons per day. These quantifiable plan savings are in addition to an estimated .17 million gallons per day passive savings stemming from conservation education, outreach and ongoing replacement of inefficient fixtures and appliances. These efforts and achievements exceed the Applicant's projections for this time period.

5. **Comment:** The Applicant's existing conservation program is effective, especially the pricing structure.

**Response:** Comments noted.

#### **Need**

Commenters alleged the Applicant does not need, or has not demonstrated a need for Lake Michigan water. Therefore, the Applicant's request for a diversion does not meet the need requirement of the Compact. Commenters gave a variety of reasons for this opinion, including:

1. **Comment:** The groundwater level in the deep aquifer is no longer declining, and may be rebounding.

**Response:** Based on monitoring well data, the department recognizes the deep aquifer rebound. This information is discussed in Technical Review section S1 and in section 3.1 of the draft and preliminary final EIS. Though the aquifer has shown some rebound, the water level in the deep aquifer is still 350 feet below pre-settlement water levels.

2. **Comment:** The Applicant's projected increase in water demand does not match the recent pattern of decreased demand, and the Applicant relies on the delineated water supply service area to support its increased demand.

Response: The Applicant's future demand exceeds its current demand for a number of reasons. First, demand is expected to increase as population and population density within the service area increase over the planning period. Second, water demand is expected to increase as water service is extended to adjacent areas that are not currently served by municipal water. Although usage rates are expected to decline for residential commercial and institutional customers, these decreased rates are not projected to offset the increase demand. Finally, the Applicant maintains that industrial production has been below anticipated levels in recent years resulting in artificially low industrial water use. The Applicant included increased industrial water demand in its projections to accommodate a possible expansion of the local industrial sector. The department finds that it is reasonable for the applicant to proactively plan its system for such contingencies that would be difficult to accommodate retroactively.

3. **Comment:** The Applicant used questionable data to make reasonable alternatives seem unreasonable.

**Response:** The department analyzed a range of water supply alternatives in section 3 of the EIS and S2 of the Technical Review. In addition, based on concern over the location of shallow wells the department analyzed an additional water supply alternative that placed shallow wells only along the Fox River to minimize potential environmental impacts to smaller tributaries to the Fox River.

4. **Comment:** The Applicant could meet its need with existing sources and improved conservation measures.

**Response:** See the Compact Implementation Coalition (CIC) alternative and water conservation sections of the response to comments.

Comment: The communities outside the City of Waukesha that are included in the delineated service area have no documented need for an alternative source of water.

**Response:** See the service area section of the response to comments.

6. **Comment:** The communities outside the City of Waukesha that are included in the delineated service area do not have water conservation programs in place.

**Response:** See the water conservation section of the response to comments.

7. **Comment:** The Compact only allows diversion exceptions for current use levels, not for future use levels.

**Response:** The Agreement/Compact standard is that "the exception will be limited to quantities that are considered reasonable for the purposes for which it is proposed," not that an exception has to maintain current use levels.

8. **Comment:** The Compact only allows diversion exceptions as a last resort.

**Response:** The Agreement/Compact standard is that "there is no reasonable water supply alternative within the basin in which the community is located, including conservation of existing water supplies." The Agreement/Compact does not require that the diversion proposal be the only option for water supply.

9. **Comment:** Radium is a known carcinogen, but Waukesha's cancer rates were not documented in the analysis and the existing data do not show evidence of an increased incidence of lung cancer in Waukesha County.

Response: State and federal drinking water standards are established to reflect both the level that protects human health and the level that water systems can achieve using the best available technology. The contaminant found in Waukesha's water has a legally enforceable primary federal standard that applies to public water systems. Primary standards protect drinking water quality by limiting the levels of specific contaminants that can adversely affect public health and are known or anticipated to occur in water.

#### **CIC Alternative**

#### **Summary**

Multiple comments supported the alternative put forth by CIC – a group of environmental and conservation organizations. The alternative was developed through CIC contracts with GZA GeoEnvironmental Inc. and Mead and Hunt. The CIC and others expressed the opinion that this alternative demonstrates that the Applicant does not need another water source and therefore does not meet the Agreement/Compact requirements. Comments were received that the CIC alternative was a simpler solution to the Applicant's water needs than the proposed project. Comments called for this alternative to be evaluated in the EIS. This alternative has the following components:

- The groundwater level in the deep aquifer is no longer being drawn down, and may be rebounding.
- The CIC alternative proposes continued use of existing deep and shallow aquifer wells.
- The CIC alternative proposes using radium treatment and blending as proposed in the Applicant's deep and shallow aquifer alternative to meeting radium standards.
- The CIC alternative limits projected demand to the existing water supply service area.
- The CIC alternative cites much lower cost than the proposed Lake Michigan supply.

The department also received comments questioning the cost, waste disposal and long-term viability of municipal reverse osmosis systems. These comments also expressed the opinion that the proposed project is a simpler supply alternative with one source of water and that alternatives that rely on multiple sources of water (deep and shallow aquifers) with different treatment technology are more difficult to implement and have more opportunities for operational error.

#### Response

The department reviewed the CIC proposed water supply system in consultation with the Applicant and found that the firm capacity of the proposed system would 9.3 MGD, insufficient to meet the CIC projected maximum day demand of 11.1 MGD. The calculated firm capacity takes into account Applicant projected well capacities based on recent system operation and lost capacity from implementing reserve osmosis treatment (that results in 10-20% lost to waste). This analysis including radium treatment alternatives are further described in section 2 of the preliminary final EIS.

From an environmental perspective, the CIC alternative does not consider existing and additional impacts to wetlands due to shallow groundwater pumping from the existing shallow wells. This analysis is further described in section 2 of the preliminary final EIS.

The demand projection for this alternative does not provide for the delineated water supply service area (as required in Wisconsin's Compact implementing law, Wis. Stat. ss. 281.346 and 281.348). It also assumes that per capita demand will decrease from recent

rates. While these projections may correctly predict trends in water use, they do not allow for unforeseen changes in water demand and do not accommodate the orderly addition of parcels to the City.

## **Other Water Sources**

#### **Summary**

Comments suggested that the Applicant has alternative sources of municipal water that have not been considered, including: neighboring community systems not using Lake Michigan water, other shallow well locations, quarries, area inland lakes, and other communities using Lake Michigan water.

#### Response

The Applicant reviewed or considered all of the alternative sources listed in the comments received. See Section 2 of the preliminary final EIS and Technical Review criterion S2.

## **Impacts to Lake Michigan**

## Summary

Comments expressing that the proposed project will reduce Lake Michigan water levels and water quality, and comments opposed to the introduction of a new source of pharmaceutical pollution to Lake Michigan.

#### Response

These issues are addressed in the preliminary final EIS (Section 4) and Technical Review criteria IA1 & IA2. The department finds that the proposed project is expected to have little impact on Lake Michigan water levels and water quality. The total annual withdrawal from Lake Michigan would represent 0.0003% of the total volume of Lake Michigan and 0.00006% of the total volume of the Great Lakes. The department recognizes that pharmaceuticals are a growing concern. However, the department does not have current regulatory authority to mandate the monitoring of pharmaceuticals in wastewater effluent or to require limits. If these limits were established in the future, the Applicant would be required to comply with them under their WPDES discharge permit.

Additional discussion regarding pharmaceutical pollution has been added to Section 4 of the preliminary final EIS.

#### **Effects on Root River Flows**

# **Summary**

Concerns expressed that the flows in the Root River will be affected by the proposed project's discharge to that stream. Some commenters were concerned that flooding would be exacerbated, particularly in the City of Racine. Commenters also expressed concerns regarding increased erosion and resuspension of sediments. Some commenters were in favor of increased flows in the Root River that could support fish populations and recreational opportunities.

## Response

Additional information regarding flooding and additional wastewater flow to the Root River was added to Section 4 of the preliminary final EIS. Erosion and sediment concerns related to increased flow are examined in Section 4 of the preliminary final EIS. The flooding analysis concluded that flood flows in the City of Racine will be increased by no more than 0.01 feet and a Root River sediment transport study that was conducted upstream concluded that the river stability in the location of the proposed outfall is relatively insensitive to changes in flow

# **Effects on Root River Water Quality**

#### **Summary**

The department received comments regarding degradation of water quality in the Root River, including increased levels of pharmaceuticals, pathogens, phosphorus, chloride and sediments. Multiple comments quoted the statement in the draft EIS that the proposed project's discharge to the Root River could constitute 80 to 90 percent of stream flow during very low flow periods, expressing concern that most of the flow would therefore consist of the Applicant's treated wastewater, which would be a health threat to human and aquatic populations. Other comments stated disapproval of any discharge of treated wastewater to any surface water.

#### Response

The most common method for discharging treated effluent by public and private wastewater treatment systems in Wisconsin is to surface waters (i.e. rivers, streams, lakes or Great Lakes).

Section 4 of the preliminary final EIS and Technical Review criteria R4 & R5, describe potential adverse impacts as a result of cumulative loading to the Root River and Lake Michigan. The impact of any additional loading is expected to be minimal, as draft water quality based effluent limits are expected to be at or below water quality criteria. For some water quality parameters, the discharge effluent may improve water quality as the wastewater effluent concentrations will be lower than Root River existing conditions. The proposed new discharge will be required to meet all water quality standards, which are designed to prevent degradation of the receiving water (see technical review criteria R4 & R5).

The draft EIS statement that the proposed discharge could constitute 80 to 90 percent of stream flow in the Root River under very low flow conditions has been amended in the Section 4 of the preliminary final EIS, to include low flow, base flow and flood conditions.

## **Effects on Fox River Flows**

#### **Summary**

The department received a number of comments regarding the reduction in discharge and flow in the Fox River downstream from the Applicant's wastewater treatment plant (WWTP). Concerns included impacts to fish, reductions in recreation opportunities and difficulties in maintaining the minimum flow for the Waterford Dam as required by the dam operating order.

#### Response

The preliminary final EIS states that the Fox River baseflow at the confluence of the Fox River and Pebble Creek would be reduced by 11 percent if the Applicant were to change to a Lake Michigan water source. The percent baseflow reduction to the Fox River from the reduced WWTP effluent discharge will decrease with distance from the WWTP. The preliminary final EIS has been amended to address this concern, see section 4 and Appendix A for further analysis.

#### Recent Data

#### Summary

The department received comments claiming that the Technical Review and draft EIS relied on SEWRPC modeling of the deep aquifer groundwater levels which showed declining groundwater levels. More recent data available from the USGS indicates that those levels are no longer declining as of the year 2000, and may be rebounding.

#### Response

See the "Need" Section of the Response to Comments.

## **Cost**

#### **Summary**

The department received comments stating that the draft EIS and Technical Review did not analyze costs to rate payers, that the CIC alternative would be much less costly, and that the Applicant chose the proposed diversion because the Applicant did not want to spend the money on other alternatives.

#### Response

The department included costs in sections 2, 4 and 5 of the preliminary final EIS, and S2 in the Technical Review. The department finds that that all the alternatives are 'similar in cost' (within 25%) of the Applicant's preferred Lake Michigan alternative. At this stage specific rate increases associated with alternatives are unknown. Any proposed increases must proceed through the Wisconsin Public Service Commission for required approval before rates are set.

## **Environmental Justice**

Comments were received concerning racial segregation and disparities in the southeast Wisconsin region and communities, and the effects of the proposed project on those problems. The following issues were included:

1. **Comment:** The draft EIS did not analyze and resolve the effects of the proposed project on minority populations, racial segregation and disparities.

**Response:** The draft EIS referenced studies and reports that address potential effects on minority populations, racial segregation and disparities. The preliminary final EIS includes analysis of these issues in Section 4.

2. **Comment:** The draft EIS provided census data for whites and "non-whites" but did not include more specific racial data.

**Response:** Comments noted. The preliminary final EIS includes additional racial data in Section 3.

3. **Comment:** The southeast Wisconsin region and the City of Milwaukee are highly racially segregated, especially with regard to African-American populations.

**Response:** Comments noted. The preliminary final EIS includes additional racial data in Section 3.

4. **Comment:** Racial segregation in the region is the result of many historical and ongoing policies and trends, including: housing, transportation, land availability, property taxes, business and industry outward migration, and water availability.

**Response:** Commenters provide considerable evidence of racial segregation in the City of Milwaukee and in the region. Many reasons are suggested for the outward migration of businesses, industries and white populations from the City of Milwaukee to the outlying suburban areas. None of the studies relied upon for the EIS, nor any provided by the commenters demonstrate that the availability of Lake Michigan water is a documented cause for this trend of outward migration, nor that it contributes any effects of that migration. The socioeconomic study requested by SEWRPC for the Regional Water Supply Plan found that population

growth, racial and ethnic residential patterns and job growth would not be significantly affected by the diversion.

5. **Comment:** The City of Waukesha's minority populations are small, especially African-Americans.

**Response:** The draft EIS stated that the City of Waukesha has a small minority population. The preliminary final EIS includes additional racial data in Section 3.

6. **Comment:** The proposed project will negatively affect job opportunities for racial minority populations in the City of Milwaukee by encouraging businesses and industries to move from Milwaukee to Waukesha.

**Response:** Given that Milwaukee already has a Lake Michigan water source, water availability is considered unlikely to be a deciding incentive for businesses and industry to relocate outside of the City of Milwaukee. The preliminary final EIS includes discussion of this issue in Section 4.

7. **Comment:** The proposed project will exacerbate racial segregation in the region.

**Response:** The socioeconomic study<sup>2</sup> requested by SEWRPC for the Regional Water Supply Plan found that population growth, racial and ethnic residential patterns and job growth would not be significantly affected by the diversion.

8. **Comment:** To adequately address civil rights, the analysis must also consider potential benefits to communities of color in the region if diverted water is not provided to Waukesha and communities around it thereby limiting growth.

**Response:** Not providing Lake Michigan water to Waukesha will not affect water availability in Milwaukee. Water dependent businesses in Milwaukee considering relocation may or may not move to Waukesha, but will relocate if they determine that it is advantageous for them to do so.

9. **Comment:** The proposed project is subject to Title VI of the Civil Rights of 1964 which prohibits applicants for or recipients of federal funds from discriminating based on race, color or national origin.

**Response:** No known racial discrimination is expected to result from the proposed project. The City of Waukesha would provide municipal water to all users, regardless of race. The preliminary final EIS includes discussion of this issue in Section 4.

<sup>&</sup>lt;sup>2</sup> Rast, J. and Madison, C., A Socio-Economic Impact Analysis of the Regional Water Supply Plan for Southeastern Wisconsin, University of Wisconsin-Milwaukee Center for Economic Development, July 2010.

# **Land Use**

The department received comments concerning the effects that the proposed project would have on land use in the area. The following issues were included:

1. **Comment:** The Applicant created the delineated service area to allow for excessive suburban growth and sprawl.

**Response:** The delineated water supply service area is required by and was developed according to Wis. Stat. s. 381.348. Water supply and sewer service area planning are designed to promote orderly development within a community. The sewer service area includes a delineation of land with development potential along with the delineation of wetlands and environmental corridors to be preserved. The department does not interpret the Agreement/Compact as a land use document that requires the Applicant to forfeit any future expansion as a condition for a diversion approval.

2. **Comment:** The resulting development and sprawl will be at the expense of other communities in the region, especially the City of Milwaukee.

**Response:** The socioeconomic study requested by SEWRPC for its Regional Water Supply Plan found that population growth, racial and ethnic residential patterns and job growth would not be significantly affected by the diversion.

3. **Comment:** City of Waukesha officials are on record stating the desire for growth.

**Response:** The Agreement/Compact does not include a criterion of zero growth as a condition of receiving a diversion.

4. **Comment:** A regional water policy is needed to prevent urban sprawl, industrial plant raiding by communities and to avoid impoverishment of the central city by encouraging its industries and commercial establishments to leave.

**Response:** SEWRPC currently provides regional planning for southeastern Wisconsin including delineating sewer service areas and the completion of a Regional Water Supply Plan for Southeastern Wisconsin.

5. **Comment:** The SEWRPC-delineated service area adds 17 square miles to the water supply service area. The City's Comprehensive Plan more than doubles industrial development acres with a significant increase in commercial and residential development. The communities included in the delineated service area also plan to greatly expand the area for industry. The proposed diversion will facilitate such development.

**Response:** Waukesha's water supply service area was delineated according to Wis. Stat. s. 381.348. Within the delineated water supply service area seventy percent of the land is already developed, fifteen percent is designated as

environmentally protected and fifteen percent is currently undeveloped. Ninety percent of the industrial acreage in Waukesha's 2035 land use plan will be located within the City of Waukesha, with the other ten percent in the additional communities.

6. **Comment:** The EIS must evaluate reasonable alternatives to constrain sprawl.

**Response:** The preliminary final EIS evaluates alternative water sources to the proposal and considers land use impacts, not land use alternatives.

7. **Comment:** The Comprehensive Development Plan for Waukesha County calls for low density development in areas outside the designated sewer service area, particularly in the western half of the County to preserve infiltration of rainfall and snowmelt for regional groundwater recharge. Most of the western half of Waukesha County has existing and planned development patterns at five acre densities or less, agricultural lands and other open spaces. This development pattern will protect essential groundwater infiltration areas and make municipal water supplies unnecessary.

**Response:** Comment noted. Sections 3 and 4 have been updated in the preliminary final EIS.

8. **Comment:** The Comprehensive Development Plan for Waukesha County also calls for preservation of sub-regional infiltration areas to protect key surface water· features that are dependent upon groundwater supply. Those areas have also been identified in the Plan and are being protected through public acquisition, dedication or preservation through land use regulation.

**Response:** Comment noted. Sections 3 and 4 have been updated in the preliminary final EIS.

9. **Comment:** Fox River riparian land owners' property values will be reduced due to the reduction in flow in the Fox River. Waukesha should pay for this.

**Response:** Comment noted.

#### **Employment**

## **Summary**

Comments include: Milwaukee's black and Hispanic communities manifest deep and enduring socioeconomic effects, including poverty and unemployment; jobs created in the City of Waukesha will not benefit minority populations in the City of Milwaukee due to transportation and housing problems and policies; and the proposed project will provide 300 full-time jobs during construction.

## Response

Comments noted. Section 4 of the preliminary final EIS includes analysis of employment effects.

## **Cumulative Effects**

#### **Summary**

Comments state the department did not consider cumulative effects including other communities in the Great Lakes basin that are likely to also request diversion exemptions, and the impacts from multiple diversion exemptions from communities in the Lake Michigan basin.

#### Response

The draft EIS did not have a section labeled cumulative effects, but the EIS for the proposed project is a cumulative effects analysis. Section 6 of the preliminary final EIS presents cumulative impact information. Technical Review criteria IA1 and IA2 address the potential for cumulative impacts from the diversion.

The Applicant has proceeded with an extensive review process in accordance with Agreement/Compact requirements. All future applications for diversions will be required to meet the exception standard set forth in the Agreement/Compact. Each diversion proposal within the Great Lakes basin will depend on the facts of the specific situation and will be judged according to Agreement/Compact criteria. The approval or denial of any diversion application will provide some precedent for how the Agreement/Compact criteria are evaluated.

The department is aware of only one report that examined the likelihood for other communities to apply for a diversion request under the Agreement/Compact. That report<sup>3</sup> found eight additional communities, either straddling communities or communities located within straddling counties, on the U.S. side of the Great Lakes with water quality or quantity circumstances that indicate a *possible* need to apply for a diversion.

Section 6 of the preliminary final EIS includes discussion of cumulative effects.

#### **Invasive Species**

#### **Summary**

Comments questioned how the return flow option prevents the introduction of invasive species into Lake Michigan or the tributaries, as required by the Great Lakes Compact?

<sup>&</sup>lt;sup>3</sup> Teutsch, Jared, On Track? Ensuring the Resilience of the Great Lakes Compact, Alliance for the Great Lakes, September, 2013

## Response

Section 4 of the preliminary final EIS adequately addresses this issue.

# **Review Process**

#### **Summary**

Comments regarding the project review process include: environmental review procedures require consideration of not only strictly environmental issues, but also interrelated social and economic effects. The failure of Waukesha's application, and of the draft EIS and Technical Review, to address segregation and discrimination is reason enough to deny the Application. The department is reviewing this application just as they did a controversial power plant project 15 years ago.

#### Response

The preliminary final EIS includes analysis of socioeconomic issues and effects in Sections 3 and 4. There is no Agreement/Compact requirement for the Technical Review to evaluate impacts to minority populations.

#### **Other Comments and Responses**

**Comment**: The department received multiple editorial and organizational <u>comments</u> regarding the draft EIS.

**Response:** Editorial and organizational comments were taken into consideration and where appropriate the preliminary final EIS document was updated.

**Comment:** The draft EIS does not mention water quality modeling (HSPF watershed model) completed by the Applicant.

**Response:** The department did not to use the modeling results because the HSPF model used by the applicant was calibrated to flow regimes, water quality, and land cover of 1987-1997. The department would have needed to recalibrate the model and run the model to current conditions in order to incorporate the results.

**Comment:** Neither, the Oak Creek residents or Lake Michigan international water should be negatively impacted.

**Response:** Neither Oak Creek residents nor Lake Michigan will be negatively affected.

**Comment:** A diversion will not result in a healthy water supply that is most protective of the environment in both Waukesha and the affected return flow areas.

**Response:** The proposed diversion would provide a safe water supply for Waukesha and protect the environment.

**Comment:** Biodiversity loss and ecosystem collapse rate nearly a number 5 on the scale, scoring a greater risk to the people of the planet than terrorism.

**Response:** The diversion will not result in biodiversity loss or ecosystem collapse.

**Comment:** The Great Lakes Compact certainly did not agree to accommodate nor approve opportunism and commodity losses of its water. The Great Lakes Compact essentially banned greedy white-collar theft of the drinking water commons in the Great Lakes basin.

**Response:** A duly authorized diversion exemption under the Agreement/Compact would not constitute theft.

**Comment:** The Applicant's proposed drinking water solution is to take the drinking water that belongs to others.

**Response:** The water of Lake Michigan does not "belong" to others. The authority to manage Great Lakes water, including the ability to authorize diversions under limited circumstances is designated to the Compact Council through the federally ratified Compact.

**Comment:** Past applications by Waukesha were denied by the WI DNR and the State of Wisconsin repeatedly in order to protect the outstanding resource value of unique and priceless Great Lakes' ecosystems from unnecessary water diversions that would take on cumulative adverse effects over time and set a destructive precedent.

**Response:** The department has not denied other diversion requests by the Applicant, the department has requested additional information and revisions to the proposal since the initial submission in 2010. The integrity of the Great Lakes basin ecosystem would not be compromised or significantly impacted by the proposed project, nor would a 'destructive precedent' be set.

**Comment:** The all-important integrity purpose requires immediate rejection of this application as disqualified per eligibility standards.

**Response:** The department finds the application approvable.

**Comment:** The Waukesha application's lack of sufficient details makes it deficient in all of these standards for eligibility criteria.

**Response:** The Applicant is eligible to seek an exception form the prohibition of diversion under the Compact as a "Community in a Straddling County." The department finds the application approvable.

**Comment:** Waukesha, does not meet the minimum criteria for a Great Lakes water diversion set by the Great Lakes Compact when the application fails to return diverted water back to Lake Michigan without mixing Great Lakes water with out-of-basin water.

**Response:** As discussed further in Technical Review R1, the Agreement/Compact standard requires that the proposal maximizes the return of Lake Michigan basin water and minimize Mississippi River basin water discharged to Lake Michigan. The Agreement/Compact specifically recognized that Great Lakes water and out-of-basin water may be mixed and identifies conditions this mixed water must meet.

**Comment:** I strongly oppose diverting water from the Great Lakes to the City of Waukesha. Please oppose changing the law.

**Response:** The Applicant is eligible to seek an exception from the prohibition of diversion under the Compact as a "Community in a Straddling County." An approved diversion would not change existing laws.

Comment: The Lake Michigan (LM) water source solution is a long term, reliable, and elegantly simple choice. In terms of delivering potable water, I believe simpler is better. Simpler should not be misconstrued as the "easy" solution. Simpler means the LM option is totally accountable and predictable from both a quantity and quality perspective for the flow west to Waukesha and the return east to the Root River. A multi-well groundwater system accessing deep and shallow aquifers requiring above ground advanced treatment technologies is much more complex and uncertain than pumping and returning treated water via pipes for 14 miles each way with existing treatment plants in Oak Creek (water) and Waukesha (wastewater). The engineering simplicity is benefit enough, but most important is the fact that the LM option has essentially no environmental impacts on wetlands and other surface water features. It also is more energy efficient and produces less waste than non-diversion options (with radium and RO treatment). It also is significant that Waukesha residents and businesses will no longer need to soften water, resulting in savings of energy and eliminating recharge water laden with sodium (Na<sup>+</sup>) and chloride (Cl ) to waters – which are also contaminants of concern to regulators.

**Response:** Comment noted.

Comment: Waukesha has violated the safe radium level the last 5 consecutive years as reported to the DNR annually. This is an unacceptable and unlawful public health hazard. The Waukesha school district has 12,000 students and another 1500 attend private schools. These schools provide drinking water from the water utility that, at times, exceeds the safe drinking standards. Although the Court Order does require the Utility to notify the DNR within 4 days of it's becoming aware of any *force majeure* circumstance where the utility exceeds the safe drinking standards, the institutions are not notified when they are occurring. Are we to assume the accumulation of radium within the bodies of children from K-4 through high school may lead to bone cancer at some point in their lifetime?

**Response:** Current efforts by the Applicant to address radium compliance are not under consideration with this diversion request.

**Comment:** Waukesha is without merit that it cannot meet the 2018 deadline and the court order, section 14, prohibits an argument based on financial hardship as a reason to not be radium compliant on, or as I argue, before June 2018.

**Response:** Current efforts by the Applicant to address radium compliance are not under consideration with this diversion request.

**Comment:** I see no requirement to stop pumping the deep or surface aquifers when conversion to Lake Michigan surface water is completed. Why is this issue not addressed? In fact there seems to be an assumption that pumping will continue. This is wrong. All water is interconnected. If water is to be taken from the surface of Lake Michigan, even if it is returned, the aquifers must slowly re-charge. They supplied Lake Michigan over geological time they should again.

**Response:** The Applicant intends to keep some wells as an emergency back-up supply. Emergency wells are required to meet the requirements of NR 810.22. Section 1 of the preliminary final EIS includes this information.

**Comment:** Once trade is established water becomes a readily traded commodity, these two tenants of world trade policy leave the door wide open to future mass export of our water resources by any means. The Process and Production Methods essentially says it doesn't matter whether the water is being exported in pint bottles, supertankers or pipelines; it is still water and if you allow one company to export it is one form you can't restrict another from choosing a different means of packaging or transport. And the rejection of the Precautionary Principle demands absolute proof that irreversible damage will occur despite the overwhelming wishes of the local populace or their government.

**Response:** Comment noted.